## 4 CLAIMS

## What is claimed is:

- 1. An enarthrotic prosthesis (10) characterized by:
- a head member (12) comprising an at least partially spherical ball (14) extending from a base member (18), said base member (18) rotatingly seated in a stem member (20), wherein said head member (12) is rotatable with respect to said stem member (20) even after installation in a patient.
- 2. The enarthrotic prosthesis (10) according to claim 1, wherein said head member (12) rotates with respect to said stem member (20) after installation in a patient.
- 3. The enarthrotic prosthesis (10) according to claim 1, wherein bearing surfaces between said base member (18) and said stem member (20) are finished with a surface finish that promotes rotational freedom therebetween.
- 4. The enarthrotic prosthesis (10) according to claim 1, further comprising bearing elements (22) placed at an interface between said base member (18) and said stem member (20).
- 5. The enarthrotic prosthesis (10) according to claim 1, wherein rotation of said head member (12) with respect to said stem member (20) is controlled by a biasing device (26) placed between said base member (18) and said stem member (20).
- 6. The enarthrotic prosthesis (10) according to claim 1, wherein said stem member (20) comprises an intramedullary shaft adapted to be placed in an intramedullary cavity.
- 7. The enarthrotic prosthesis (10) according to claim 1, wherein said at least partially spherical ball (14) is mounted on a post (16) extending from said base member (18).
- 8. The enarthrotic prosthesis (10) according to claim 1, wherein said prosthesis (10) is coated with a material that enhances adhesion with bone.